In re Appln. of ALFRED WING KIN CHAN Application No. 09/982,993

REMARKS

In response to the Office Action mailed July 10, 2003, finally rejecting the claims, Applicant proposes to amend his application and request reconsideration in view of the foregoing amendment and following remarks. No claims are proposed to be added or canceled so that claims 1-6 will remain pending upon entry of this Amendment.

It is proposed to amend claim 2 to avoid an issue concerning antecedent basis. Claim 1 refers to internal screw threads within a pipe fitting that is the subject of the invention and to trailing screw threads of a pipe that may be connected to the pipe fitting. The meaning of the term "screw threads" in claim 2 is unambiguously resolved by the proposed amendment of that claim, avoiding any potential issue as to antecedent basis. No new issue is raised by this minor clarifying amendment.

The Examiner objected to all pending claims as informal and not pursuant to any statutory section. The gist of the objection is that there is an inconsistency in the claim in stating that the extension collar has a wall thickness substantially equal to the wall thickness of the internally threaded portion because the wall thickness of the internally threaded portion varies because the internally threaded portion includes tapered threads. Respectfully, Applicant traverses the objection because of the presence of the word "substantially" in claim 1 and the description in the patent application of what constitutes a tapered thread.

The tapering of the threads, both of a pipe for connection to a pipe fitting within the scope of the invention and the internal threads of the pipe fitting receiving the threaded pipe, is a slight taper. See the paragraph in the patent application at page 4 beginning in line 10. That paragraph states that the angle of taper is "about 1° to 5°. With this small angle of taper, the amount of variation in the thickness of the wall of the internally threaded portion of the pipe fitting is very small for a pipe fitting that has an internally threaded portion of conventional and rational length and average thickness. While, to be sure, the wall thickness of the internally threaded portion is not absolutely uniform, as described in the patent application, that wall thickness is nearly uniform. Therefore, the claim describes the extension collar as having a wall thickness substantially equal to the wall thickness of the internally threaded portion.

The word "substantially" is frequently used in claims to reflect that there is not an exact match to a particular term. The reviewing Courts have dealt with this issue frequently. A very recent example is <u>Anchor Wall Systems</u>, <u>Inc.</u> v. <u>Rockwood Retaining Walls</u>, 02-1592 Fed. Cir., slip opinion, August 13, 2003. A copy of pages 18 and 19 of

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that opinion is attached. In these pages, the Court discusses the term "generally parallel" and holds that the term does not require precise parallelism. The term "substantially" is discussed in the same context as "generally". The reasoning and holding of <u>Anchor Wall</u> apply here to the term "substantially equal", which clearly means approximately equal, not precisely equal.

In other words, the term "substantially equal" provides for some variation between the two thicknesses that are described as substantially equal in the claims. That minor variation encompasses the tapered wall thickness of the internally threaded portion of the pipe fitting. Applicant does not disagree with the Examiner that parts of the internally threaded portion are not precisely equal in thickness to the collar thickness. However, that fact is not inconsistent with nor contrary to what is claimed. Accordingly, the objection should be withdrawn.

Of the pending claims, claim 1 is the only independent claim. That claim, and claim 4, was rejected as anticipated by Miles (U.S. Patent 272,574). The rejection of all claims is founded upon that assertion of anticipation. The rejection is respectfully traversed.

In supplying the basis for the rejection, the Examiner stated that in Miles, the "end portion of the collar (b) appears to be the same thickness as the internal thread portion (s)." Applicant must respectfully disagree.

The internally threaded portion of the fitting illustrated in the single figure of Miles is identified with the reference letter S. The collar has been identified by the Examiner as the element with reference letter b. There is an end on the collar not given a separate reference letter in Miles. It is apparent that the extension collar b, neglecting the end of the fitting, is substantially thinner than the internally threaded portion S and must be substantially thinner in order to receive the lead or other caulking material interposed between the collar b and the pipe a. This conclusion follows because there is no change in outer diameter of the pipe fitting of Miles between those two sections, i.e., the internally threaded portion and the portion receiving the caulking.

The end of the pipe fitting in Miles has a greater wall thickness than the intermediate portion but it is clear from an inspection of Miles' figure that the wall thickness of that distal end is substantially less than the wall thickness of the internally threaded part S. There is no description within Miles suggesting that these thicknesses should be the same or different and therefore the conclusion that Miles anticipates claim 1 and its dependent claim 4 is without any support in Miles and cannot be properly maintained.

Claim 2 was rejected as obvious over Miles in view of Boynton (U.S. Patent 2,234,957). This rejection is respectfully traversed.

In the discussion of the rejection of claim 2, there is a reference to Nuttall which is understood to be inadvertent. The rejection of claim 2 based upon Miles and Boynton is founded upon the assertion that claim 1 is anticipated by Miles. Since there is no such anticipation, the rejection of claim 2 cannot be properly maintained.

Claim 3 was rejected as obvious over Miles in view of Pelletier (U.S. Patent 4,730,855). This rejection is respectfully traversed.

Pelletier was cited with respect to galvanized fittings and Applicant does not dispute that galvanized materials and pipe fittings are described in Pelletier. However, the rejection of claim 3 is founded upon the alleged anticipation of claim 1 by Miles, a rejection that cannot properly be maintained. Thus, the rejection of claim 3 should be withdrawn.

Claims 5 and 6 were rejected as obvious over Miles in view of Boynton and Pelletier. This rejection is traversed for the same reason that the rejections of the other dependent claims are traversed, namely that the rejection depends upon the anticipation of claim 1 by Miles, a rejection that cannot be properly maintained.

For the foregoing reasons, the claims are patentable over the prior art applied in rejecting claims 1-6 in the Office Action mailed June 10, 2003. Accordingly, entry of the foregoing amendment, reconsideration, and allowance of claims 1-6 are earnestly solicited.

Respectfully submitted,

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